Connectivity Key to Education Development with Cambium’s PMP430

Situation

With more than 800 languages officially recognized among its seven million people, Papua New Guinea has some of the most difficult geographical and challenging weather conditions anywhere on earth. Approximately 80% of its population live in remote villages with no road access.

The challenge for Digicel Business, Cambium Networks’ partner, was to connect the country’s Department of Education’s head office with its regional offices, serving over 10,000 schools across the country - in some of the remotest locations. Without access, the administrators and teachers at the regional offices had no modern communication, use of systems or applications, meaning they were unable to perform simple transactions and tasks, such as payroll.
Solution

The solution was Digicel Business’ Private Branch Networks VPN service, a unique service that has been tailored to provide secure VPN (virtual private network) connectivity for branch offices and low latency resulting in fast response. Playing a key role was Cambium’s PMP430, a fixed wireless broadband solution that operates in the 5.4 GHz and 5.8 GHz frequency bands, and extends high-speed connectivity to unserved and hard-to-reach locations and customers, with significantly less investment. Equipped with OFDM technology, the PMP430 delivers outstanding throughput, long range, line of sight (LOS) and near-line of sight (nLOS) performance for reliable and secure data, voice and video connectivity.

Results

With the effective combination of Cambium’s Point to Multipoint PMP430, and Digicel’s countrywide coverage, implementation has been ongoing since March 2012, enriching the learning experience for students and teachers. Consistent and reliable connectivity has been achieved for the first time, allowing all staff to have unprecedented access to vital tools and services.

“Bringing together the Cambium PMP430 with our own virtual private network service allowed us to provide connectivity to thousands of schools through the Department of Education offices across Papua New Guinea. Connecting the department’s offices across the country provides a critical line of communication, enriching the learning opportunities for students,”

GARY SEDDON, CEO DIGICEL BUSINESS.